

## **Prevalence of neurotic symptoms: a changing pattern**

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*This study concerns changes in the prevalence of neurotic symptoms as reflected in symptom check-lists reported by 3586 neurotic patients treated in a specialised day-hospital from 1979 to 1999. The results show a transformation of the clinical picture over a period of 21 years.*

**Key words:** neurotic disorders, symptom prevalence, transformations

Modern descriptions of neurotic disorders vary significantly from those presented in earlier papers [e.g. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]. This may be due to a change in the manifestation of the illness, perhaps due to the growing knowledge of psychopathology amongst the general public. Changes in the form of symptoms over years and their variability in different social milieus are usually explained by differences in socio-cultural influences as well as living conditions (e.g. type of stressing factors) which generate the psychopathologic phenomena.

The course and direction of changes in the syndromes of neurotic disorders still remains unclear. Although the disappearance of some forms, e.g. "Grand Hysterie", i.e. generalised hysterical seizures [13], seems to be evident, little is known whether it is the frequency of the particular symptom that changes or the whole syndromes or "disorders". Similarly, there is no convincing evidence that the ever so less frequent diagnosis of psychastenia and a more common diagnosis of dysthymia or anxiety disorders is a result of objective changes of the symptomatology in the past century. It could be merely a consequence of the changing cognitive schema imposed by contemporary classification systems [14, 15, 16].

Moreover, even some convictions concerning neurotic symptomatology and epidemiology seem to be based on myths rather than on scientifically based knowledge. Such is, for instance, the case of the differences in the type and prevalence of neurotic symptoms in women and men [17], the growing numbers of neurotic disorders along with the development of the civilisation (especially the consequences of the socio-economic and cultural conditions in technological societies), and so on.

Having this in mind we conducted a study with the aim to answer the following questions: Does the prevalence of any specific neurotic symptom in a population of treated neurotic patients vary over time and if so what is the direction and the charac-

ter of that change over a period of 21 years? Such a time span seems adequate for a change in the clinical picture to emerge.

### Material and method

The study used symptom check-lists "O" filled out by 3586 persons (2256 women and 1130 men) aged 19 to 68 years, mean age 36,1 years). They were treated during the years 1979-1999 as Day-Hospital patients at the Centre for the Treatment of Neurotic Disorders, Department of Psychotherapy, Jagiellonian University in Cracow.

The "O" check-list provides indirect data about the appearance (during the last 7 days preceding the examination) and the intensity of symptoms of some neurotic disorders. The 138 items are arranged into 14 scales; SCL-"O" shows also some symptoms of personality dysfunction and of behavioural syndromes, which often accompany the neurotic disorders. The scoring of GSI consists of simple addition of the following replies: "a" (ailment is insignificantly troublesome), "b" (medium troublesome) and "c" (significantly troublesome). This questionnaire correlates highly with SCL-90 and is even more reliable for the diagnosis of neurotic disorders. The detailed psychometric properties of the questionnaire were published previously [18].

The questionnaires were filled out by the patients during initial diagnostic examinations, before the beginning of the therapy. Questionnaires with more than three missing answers were not included in the study. Those with improper data collection were also excluded; therefore the number of the analysed questionnaires was lower by 10,2% than the number of persons treated in this time.

Separation of the disorders into precise ICD-10 categories proved to be almost impossible due to changes in the diagnostic concepts which took place during the period under study. We can only roughly assume, that circa 25% of the population entered treatment because of various anxiety disorders (phobias, generalised anxiety disorder and others), approximately 20% because of somatoform disorders, circa 15% were suffering from dysthymia, circa 15% from dissociative disorders, and circa 5% had obsessive-compulsive disorder. Around 12% made up the category of "other neurotic disorders", especially neurasthenia, another 8% had diagnosis of behavioural syndromes (primarily eating disorders) and personality disorders not associated with manifested neurotic symptoms. The number of patients within any single diagnostic category treated in one year was very small. For this reason those data were not taken into account in the analysis.

The patients were divided into groups according to the year of admission into treatment. Table 1 shows the number of patients treated in a single year, variations in the mean severity of the syndrome (GSI) and variations in the mean number of symptoms present during the following years.

Table 1

**Number of patients and the mean intensity of neurotic disorders (GSI of SCL-O)**

Year	No. of SCL "0"	Women		Men		Differences men vs women
		No. of SCL mean GSI	Mean no. of symptoms	No. of SCL mean GSI	Mean no. of symptoms	
1979	124	80 438	<b>80.8</b>	44 321	<u>64.1</u>	.001
1980	109	67 397	73.4	42 337	67.4	.05
1981	145	90 409	77.7	55 330	66.3	.01
1982	172	91 <b>440 *</b>	78.0	81 371	73.3	.01
1983	120	60 399	76.2	60 <b>388</b>	<b>75.9</b>	n.s.
1984	147	69 425	77.4	78 357	70.2	.01
1985	169	79 423	78.5	90 371	71.2	.05
1986	142	81 425	<b>79.8</b>	61 359	71.9	.01
1987	134	75 394	74.6	59 349	68.0	n.s.
1988	159	90 408	75.8	69 346	68.1	.05
1989	153	103 396	75.0	50 348	68.1	.05
1990	190	127 419	78.5	63 <b>396</b>	<b>77.4</b>	n.s.
1991	196	124 409	77.8	72 391	75.2	n.s.
1992	182	112 428	79.8	70 <u>283</u> **	<u>57.6 *</u>	.001
1993	180	124 395	74.0	56 339	67.3	.05
1994	189	123 403	76.3	66 372	73.5	n.s.
1995	202	135 <u>379</u>	<u>71.8</u>	67 339	68.0	n.s.
1996	189	129 381	<u>71.7</u>	60 <u>319</u>	65.5	.01
1997	200	146 <u>376</u>	72.0	54 340	69.0	n.s.
1998	241	173 380	72.4	68 360	73.1	n.s.
1999	243	178 390	74.6	65 356	68.8	n.s.
Long-term mean		402	75.7	353	69.7	
S.D.		152	2.9	250	4.4	

' p<0.05; \* p<0.01; \*\* p<0.001. The two highest GSI values and two highest mean numbers of symptoms are marked in bold, the two lowest are underlined.

The number of people treated in each one year increased from 109 (in 1980) to 241 (in 1998) due to the expansion of the institution and does not necessarily imply an increase in the number of persons requesting treatment. However, the differences of mean values of GSI, like the information concerning the mean number of symptoms in the different years, does not only describe the patient sample, but it indicates the mean severity of disorders of the patients at the time they decided to begin the treatment. It also shows the relation between the number of symptoms and their intensity.

Out of the 138 variables in the symptom check-list "O", 12 were omitted in the analysis – some are repetitions used for control of reliability and some are items included in the SCL for clinical purposes but not connected directly with neurotic disorders (e.g. allergic symptoms).

The prevalence of each symptom, i.e. the proportion of answers other than 0 on any of the 126 items in women's questionnaires and 125 in men's questionnaires<sup>1</sup> was determined in each year. This was recorded regardless of the severity of the symptom. The number of replies, reporting the presence or on the absence of a symptom, was taken as 100%, even though it was slightly smaller than the number of questionnaires, for reason of an occasional absence of an answer.

The statistical significance of deviations of mean GSI values in any one single year from the long-term mean, was determined with a parametric test of statistical significance for the expected value (mean). The significance of differences between GSI of women and of men treated in the same year was determined with a t-student test (table 1).

The statistical significance of deviations from the mean value of the prevalence of a symptom was assessed by the test for two structure coefficients, measured in independent trials. In case of extremely high or extremely small numbers of patients with such a symptom, the modification of Ferguson and Takane (1997) was used.<sup>2</sup>

Absence of a deviation from the mean on a level of at least  $p < 0.05$  level was considered as evidence of constant prevalence of a given symptom. Two or more statistically significant deviations from the long-term mean value were considered as a high probability of change of prevalence.

## Results

The prevalence of 14 (11.1%) symptoms in the female population and of 21 (16.8%) in the male population did not differ from the long-term mean. (See Table No 2).

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<sup>1</sup> One variable concerns menstrual disorders

<sup>2</sup> Statistical analyses done by Adam Dębowski and Jan Przetacznik

Table 2

**No statistically significant changes of symptoms' prevalence**  
**A. Women**

Variable no.	Prevalence of symptom in a year (%)																				Long-term mean	
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
52	40	43	40	43	43	44	45	40	46	38	37	39	45	45	31	37	34	39	38	36	38	39.7
78	31	16	28	32	34	28	25	28	23	32	27	24	23	24	20	31	20	20	26	29	32	26.7
8	26	22	25	34	23	33	26	32	25	23	23	25	25	35	23	27	23	26	26	26	28	26.8
39	72	71	73	63	68	66	64	67	61	67	64	68	74	75	65	69	68	63	61	63	69	67.5
79	68	74	73	67	60	62	67	70	61	64	65	68	71	63	68	63	60	63	63	64	61	65.6
47	40	37	35	46	43	47	53	35	50	41	44	49	44	43	41	38	44	44	42	39	46	43.1
67	56	50	63	57	43	50	58	64	58	54	55	59	54	47	50	50	47	56	52	50	50	53.5
2	97	95	96	95	96	91	97	92	94	95	96	96	98	98	96	98	97	98	95	96	95	96.4
36	77	89	87	86	88	82	81	88	75	82	77	78	85	83	78	82	82	81	81	83	78	82.2
30	71	76	65	82	68	69	73	74	69	75	76	71	80	78	68	74	77	67	74	72	73	73.5
125	68	68	52	60	60	55	53	62	62	53	57	59	60	62	56	55	57	58	58	64	58	59.3
116	64	59	63	60	66	62	64	60	66	71	67	67	63	66	62	68	57	58	70	61	62	64.0
94	27	22	28	30	34	24	27	27	26	34	28	28	26	33	30	23	27	20	23	25	25	27.2
132	50	42	38	49	46	46	50	50	45	48	46	53	52	52	54	50	45	44	52	48	46	48.0

**B. Men**

Variable no.	Prevalence of symptom in a year (%)																				Long-term mean	
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998		1999
18	84	<u>73</u>	83	88	78	82	85	80	81	85	87	79	77	80	78	83	76	76	<b>90</b>	83	80	81.9
58	40	42	40	45	41	37	43	31	40	47	40	<b>49</b>	43	31	<u>28</u>	43	35	38	40	45	47	40.9
32	<u>36</u>	50	<u>36</u>	43	46	50	43	57	45	51	41	55	<b>56</b>	<u>36</u>	42	54	41	43	38	50	46	46.4
61	15	19	16	14	28	23	30	19	23	28	21	25	<b>30</b>	<u>12</u>	16	19	22	25	22	25	16	22.1
121	<u>38</u>	50	40	50	<b>64</b>	43	54	52	55	52	56	63	55	47	50	60	52	44	53	60	55	52.7
<b>8</b>	18	16	23	24	26	17	21	24	22	<b>27</b>	16	26	26	<u>14</u>	23	25	25	26	29	<b>30</b>	27	23.7
128	50	40	41	<u>30</u>	44	37	47	39	35	36	41	49	48	34	30	<b>50</b>	40	33	49	35	44	40.8
7	50	50	61	67	61	60	55	57	52	54	62	<u>49</u>	52	52	66	66	56	60	71	57	62	58.5
22	59	54	<u>52</u>	56	60	<u>52</u>	64	55	55	65	<b>72</b>	66	69	58	69	65	65	66	57	69	67	62.2
<b>36</b>	84	71	70	80	73	73	81	<b>85</b>	72	69	75	74	84	<u>68</u>	75	75	82	81	75	82	78	77.1
56	72	83	74	77	80	78	81	75	74	78	74	<b>85</b>	77	71	75	80	77	71	75	77	<u>70</u>	76.9

26	75	69	<u>61</u>	69	69	71	76	73	72	76	63	<b>77</b>	72	67	62	75	67	71	64	75	72	71,1
66	88	85	81	90	93	92	86	93	91	81	87	<b>88</b>	91	85	87	81	82	80	88	85	86	87,2
75	68	64	61	72	78	67	68	68	66	65	<b>80</b>	65	76	<u>58</u>	66	66	73	66	72	67	70	68,8
125	54	45	<u>41</u>	54	56	48	53	45	44	46	47	55	<b>59</b>	44	51	57	55	50	53	55	58	51,7
110	52	<b>61</b>	47	53	56	43	55	50	42	53	50	57	55	<u>41</u>	48	57	61	51	55	54	49	52,2
<b>94</b>	<u>20</u>	<b>38</b>	27	34	34	30	25	31	33	26	23	28	30	24	<u>19</u>	33	25	30	27	29	24	28,6
103	47	45	61	53	63	53	53	63	49	52	43	60	51	<u>42</u>	57	56	47	51	48	52	52	52,9
113	50	57	60	<b>62</b>	55	58	60	62	54	56	51	60	55	<u>47</u>	51	59	50	<u>46</u>	53	52	49	55,3
117	40	45	45	46	<b>58</b>	44	55	55	50	43	41	52	45	44	48	53	40	44	<u>35</u>	41	36	46,5
<b>132</b>	36	28	32	37	53	47	45	39	44	42	43	47	43	38	35	43	47	44	<u>50</u>	51	44	43,1

The highest values are marked in bold, the lowest are underlined. Numbers of variables with constant prevalence in both gender populations are marked in bold.

Obsessive and compulsive symptoms: obsessive thoughts, compulsions and ideation – variable number 18, those of blasphemous and obscene content – number 58, need to unnecessarily repeat actions – number 32, need to wash one's hands, touch objects, etc. – number 52, need to count lampposts, cars, etc. – number 78, anxiety symptoms: Feeling afraid in open spaces or on the street – number 61, unjustified anxiety about closest relatives – number 121, derealisation: feeling of unreality of certain objects – variable number 8, feeling of low intensity of experiences – number 128, sleep disorders: difficulty in falling asleep – number 39, frequent awakening at night – number 79, sexual dysfunctions: dissatisfaction with sexual life – number 7, lack of sexual interest – number 47, considerably lowered or absent sexual drive – number 67; depressive: lowered mood – number 2, feeling guilty, blaming oneself – number 22; others: absent-mindedness – number **36**, "nervousness", motor tension – number 56, memory impairment – number 26, difficulty in concentrating – number 66, low self esteem – number 75, feeling of alienation – number 30 and 125, feeling that the outer world is unfriendly – number 110, constant anger, irritation – number 116; somatic dysfunctions: excessive salivation – number 94, trouble getting your breath – number 103, tremor of eyelids, face, head, etc. – number 113 and undefined "migrating" aches – variable number 117, polyuria – number **132** (numbers applying to female population only were presented in italics).

A considerable majority of the variables – 112 among women (88,9%) and 104 (83,2%) among men – showed at least one statistically significant deviation at the level of  $p < 0.05$  from the long-term mean of symptom prevalence. (In 53 variables out of the 112 in the female group and in 45 of the 104 in the male group, the level of significance was at  $p < 0,01$  or  $p < 0,001$ .)

In the female population, significant deviations in only one of the years were observed in 35 variables (27,7% – numbers 7, 13, 15, 18, 25, 27, 28, 33\*, 35, 37\* 38\*, 41, 42, 46\*, 48\*, 49, 53, 55\*, 61, 65, 66, 70, 72\*, 73\*, 74\*, 75, 80\*, 90\*, 107, 108, 110, 115, 118\*, 131, 137), in the male population in 32 variables (25,6% – numbers 1, 3, 12, 17, 33\*, 34, 37\*, 38\*, 43, 46\*, 48\*, 50, 51, 52, 55\*, 60, 62, 63, 67, 72\*, 73\*, 74\*, 80\*, 83, 90\*, 93, 95, 98, 106, 118\*, 126, 135).<sup>3</sup>

<sup>3</sup> See tables in the annex. Variables with an asterisk are those where significant differences were present in both male and female populations.

At least two statistically significant deviations (on the level of at least  $p < 0,05$ ) from the long-term mean value was observed in 77 variables in the female population (61,1%) and in 72 (57,6%) among men. The largest number of significant deviations – seven – were observed in the variable number 40 (pain in heart and chest) and – six – in the variables number 29, 113, 117 and 123 (also somatic symptoms), all in the female population. Five significant deviations were observed in the female population, namely variables number 14, 54, 59, 71, 83 and 106, and four in the male population namely variables number 9, 68, 116 and 124.<sup>4</sup>

In some variables, the statistically significant deviations from the long-term mean occurred only in one direction (increase or decrease of prevalence). In the female population, these were the following variables: number 4, 44 and 58 (see table 3), number 10, 34, 56, 77 and 93 (see table 4), 21, 84, 99, 124 and 138 (table 5), 81, 82, 105 (table 6) and 127 (table 7); in the male population: 31, 81, 115 (table 3), 29 and 40 (table 4), 64 and 123 (table 5), 2, 6, 30 and 105 (table 6), 84 and 136 (see appendix).

In 48 variables at last two significant deviations from long-term mean prevalence occurred in both genders. In 29 variables they occurred only in the female group (variables 1, 3, 12, 17, 22, 26, 32, 34, 43, 50, 51, 56, 58, 60, 62, 63, 83, 93, 95, 98, 103, 106, 113, 117, 121, 126, 127, 128, 135); in 24 variables these deviations were observed only in the male population (variables no 2, 13, 15, 25, 27, 28, 30, 35, 39, 41, 42, 47, 49, 53, 65, 70, 78, 79, 107, 108, 115, 116, 131, 137. (In total – 77 in the female and 72 in the male population).

In both gender populations the prevalence of five symptoms was gradually rising (especially in the years 1993 – 1999): persistent anxiety (variable number 4), panic attacks (number 44), depersonalisation (feeling of unreality, strangeness of one's own body – number 68), flatulence (number 31), hunger attacks (number 59). Among the women, the increase in the prevalence of symptoms was also noticed in two variables: number 22 – feelings of guilt, number 58 – blasphemous or indecent thoughts and ideation (the prevalence of these symptoms among men was relatively constant, see table 2). In the male population the prevalence of two variables increased: number 81 – anxiety when being in a crowd (for women – see table 6) and number 115 – feeling of dependence (for women – see appendix). The graphs of these changes in prevalence are presented in table 3.

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<sup>4</sup> 29 – headaches, 113 – Trembling (of eyelids etc), 117 – "migrating" aches, 123 – lack of balance, 14 – vertigo, 54 – loss of appetite, 59 – hunger strikes, 71 – anxiety in closed spaces, 83 – fainting and 106 – difficulty in thinking; 9 – vomiting, 68 – depersonalisation, 116 – constant feeling of anger and 124 – anxiety of losing control.

Table 3

## Tendency to gradual increase of prevalence of symptoms

Variable no.	Prevalence of symptom in a year (%)																	Long-term mean				
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		1996	1997	1998	1999
4 - wom.	87	74	76	85	75	84	84	85	81	87	84	85	83	88	90	87	85	86	84	83	79	84.1
4 - men	61	64	54	80	81	67	69	83	79	72	77	74	81	64	71	87	82	73	81	83	78	75.2
44 - wom	50	32	43	52	30	47	59	55	51	54	53	54	51	53	50	58	51	50	53	50	51	51.1
44 - men	31	35	36	38	46	32	37	39	42	34	40	55	47	28	35	45	38	46	42	55	46	40.9
68 - wom.	20	14	17	18	16	20	18	28	20	22	17	27	25	22	13	26	26	24	18	28	33	22.9
68 - men	06	14	12	09	18	12	22	26	20	23	07	17	22	12	23	31	17	18	27	30	30	19.6
31 - wom.	30	37	33	48	43	31	48	33	40	44	40	52	48	42	43	46	51	48	48	43	43	43.8
31 - men	22	26	43	29	36	50	38	36	47	36	51	47	48	37	46	46	44	43	47	48	53	42.3
59 - wom.	25	32	23	21	30	18	21	30	21	23	26	29	31	25	32	39	33	35	37	44	43	31.5
59 - men	27	28	18	14	25	16	26	22	25	26	21	39	38	18	16	22	31	30	24	36	27	25.6
22 - wom.	71	67	67	67	63	66	63	72	62	67	66	66	71	72	70	71	79	72	75	77	73	70.8
58 - men	25	23	13	26	25	20	21	25	22	21	15	20	27	24	17	29	28	29	23	29	28	24.3
81 - men	38	26	27	40	53	42	43	45	45	47	34	52	54	24	44	46	43	46	48	54	44	43.5
115 - men	56	54	45	61	63	52	58	49	47	50	51	52	55	48	55	56	56	56	48	67	67	55.4

'p<0.05; ''p<0.01; ''p<0.001. The statistically significant deviations above the mean value are marked in bold, the deviations below the mean are underlined. Sometimes the extreme deviations from the mean value were not statistically significant and then they were printed in italics. The table is divided with vertical lines into 7 year periods in order to make it more legible.



In other variables an opposite tendency, i.e. a tendency of decrease in the prevalence of the symptoms within the passing years was observed in both gender populations. Those variables included tiredness (number 86), anxious expectations (stage fright – number 104), social phobia (number 10), pain in heart and chest (number 40), headaches (number 29), muscle pains (number 134), sensory conversions (temporary loss touch or pain sensation – number 23), loss of appetite (number 54 – table 4a).

Some symptoms, especially dysthymic and somatic ones, occurred less frequently with the years exclusively in the female population<sup>5</sup> or exclusively in the male population. They are represented in table 4b.

Prevalence changes of some symptoms were fairly parallel both in women and men (for instance the variable number 59, table 3). Other examples are presented in the table 5A.

Most of the symptoms change their frequency in the female population in other periods than in the male population. This difference can be seen in the variables number 16 – feeling of tension, 9 – vomiting in situations of nervousness, 69 – diarrhoea, 101 – specific phobias, animals, objects and places 129 – muscle tension, 76 – aggression outbursts on objects, 114 – increased sweating, 5 – tendency to cry frequently, 96 – uncontrolled outbursts of anger, 124 – feeling afraid of losing control, catastrophic anxiety, 138 – *deja vu*, 21 – anxiety in loneliness e.g. in an empty flat, 88 – feeling of living in a dream, 89 – muscle fibrillation, trembling, 123 – lack of balance, 99 – insomnia, 84 – feeling of undefined danger. Sometimes the directions of changes in males and females were even in the opposite direction. Examples of that are presented in table 5B (also see variables number 40 and 59 in table 4).

Sometimes the prevalence change of different symptoms was almost parallel. Beside the course of symptoms' changes presented in other tables (for instance in female population – fainting, number 51 and faintness, number 83, see table 4; in men's population – hypochondriac symptoms, variables number 57 and 97, see table 5A etc), some groups of symptoms, whose prevalence changed in the same rhythm (other in female population, others among males – for example variables number 20, 45, 105) are presented in the table 6 A and B.

Other symptoms, beside the ones presented in the tables 3, 4 and 6, whose prevalence differed from the long-term mean value only in female population or only in male population, are presented in table 7. It includes also other variables, which were not shown in other tables and which showed some essential deviations (119, 6, 77, 82, 36).

The number of symptoms, whose prevalence differed significantly from the long-term mean, was especially high during some years and very low in the other years. Table 8 shows the symptoms, whose prevalence changed only in one out of the annual periods (in total – 112 variables in women's population and 104 in the male population).

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<sup>5</sup> In the male population, besides variables 77 and 136 (see table 7b) there is only one significant deviation from the long-term mean value (see annex) or no deviation. Variables 25 and 119 in the female population – see annex.

Table 4

## A. Tendency to gradual decrease in the prevalence of symptoms in both populations

Variable no.	Frequency of symptom appearance in given year (%)																	Long-term mean				
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		1996	1997	1998	1999
86 – wom.	89	86	92	92	93	92	93	90	87	91	88	97**	87	86	86	88	81'	82	84	83	77**	87.3
86 – men.	90	83	85	91	81	92'	88	88	89	79	89	93'	86	72*	82	84	80	80	79	82	80	85.0
104 – wom.	96	92	94	93	98'	92	92	90	92	96	96	91	94	94	89	91	91	88'	92	94	90	92.7
104 – men.	88	95	90	96'	91	88	82'	91	88	88	92	90	94	81'	87	90	89	76*	92	94	84	89.1
10 – wom.	82	85'	65	78	81	76	84'	76	75	65	68	76	75	70	79	68	71	67	74	72	69	73.7
10 – men	75	64	85	90*	73	79	76	81	77	69	69	77	83	58'	73	68	70	68	79	72	64	74.5
40 – wom.	78'	64	77'	73	76	68	69	72	74	69	63	72	71	81**	69	73	62	55'	50**	54**	56*	66.7
40 – men	61	59	58	67	68	62	67	70	59	59	63	71	66	50'	51	59	58	44*	64	60	53	61.2
29 – wom.	80'	62	80'	74	81'	76	74	72	72	67	64	65	67	77'	66	63	57*	65	65	61'	67	68.4
29 – men	56	52	60	67'	63	61	61	65	54	56	47	73'	58	62	50	48	49	51	60	61	50	58.2
134 – wom.	63	62	75'	67	69	68	67	70	72	69	58	76*	72	73	69	64	62	58	58	62	52**	65.5
134 – men	52	64	70	65	71	64	65	62	59	55	60	76'	70	58	55	63	58	48'	57	69	50	62.1
54 – wom.	62	68'	62	61	53	63	55	70*	57	53	49	55	54	66'	54	61	51	52	43*	43**	48	55.1
54 – men	50	54	43	59'	58	52	45	50	49	42	37	57	55	30*	51	42	56	43	49	39	41	48.1
23 – wom.	28	28	38'	31	36	24	27	30	37	27	29	38*	27	35	25	32	22	20'	24	21'	24	28.4
23 – men	25	28	27	16	20	30'	20	31	18	23	23	25	25	11'	12	28	10'	28	18	26	16	22.1

Table 4

## B. Tendency to gradually decrease the frequency of symptoms only among the women's population or only among men

Variable no.	Prevalence of symptom in a year (%)																			Long-term mean		
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997		1998	1999
50 - wom.	80*	66	71	65	60	47*	66	77*	56	56	61	72*	65	66	60	61	60	63	64	66	62	64.0
11 - wom.	53*	32	50	45	41	43	45	32	31	43	46	40	42	46	41	41	35	35	31*	38	45	41.0
26 - wom.	87*	82	80	79	75	77	80	83	73	68	82	77	79	76	70	72	71	74	78	69*	77	76.0
106 - wom.	89*	87	84	89*	80	81	86	86	81	80	73*	84	80	80	76	82	71*	80	83	75*	80	80.7
14 - wom.	83*	70	82*	75	81	82	68	59*	72	69	68	79	71	80*	77	70	71	62*	69	64*	69	72.2
51 - kob.	34**	24	30*	35**	27	20	24	20	20	14	21	19	18	22	15	13	14	16	13	11*	17	19.1
83 - wom.	50*	42	52**	49*	42	39	37	40	32	33	34	28	36	35	32	32	27	28	24*	24*	30	34.0
102 - wom.	97*	88	85	89	85	89	86	89	86	89	84	85	87	88	77*	89	87	78*	80	83	84	85.8
136 - wom.	66*	50	48	51	63*	59	58	62*	50	44	49	57	49	59	49	49	41*	46	39*	45	48	50.6
109 - wom.	63	53	66*	59	50	66*	55	58	54	63	51	59	58	53	54	51	52	43*	47	47	49	54.2
117 - wom.	55	53	62*	54	58	59	53	51	62	57	54	62*	51	62*	52	55	45	41*	34**	43*	48	52.0
62 - wom.	46	45	39	56**	38	32	41	40	36	40	35	31	43	39	33	33	41	34	36	36	29*	37.5
34 - wom.	64	62	66	65	63	68	65	67	56	58	54	63	54	56	61	54	48*	49	52	48*	53	57.5
128 - wom.	53	50	46	56	61*	43	53	49	51	45	43	46	41	52	43	47	36*	45	41	41	44	46.3
126 - wom.	77	77	86	83	83	85	86	88*	78	86	76	80	80	86*	72	77	77	71*	77	74	71*	79.0
56 - wom.	82	79	84	84	80	86	83	85	78	83	84	86	81	85	83	83	75	79	75*	75*	78	81.3
77 - wom.	64	64	68	68	61	68	69	71	74	75	72	71	70	70	70	73	60	57	58*	61*	55*	66.2
93 - wom.	53	40	54	47	48	43	52	52	43	52	54	53	50	54	48	51	41	35*	38*	38*	38*	46.8
25 - men	86	88	80	92*	88	86	87	89	80	86	92	89	89	71*	91	83	76	77	87	81	75	84.3
119 - men	72	71	65	66	76*	61	64	57	59	63	62	73	68	51	55	56	52	50*	64	61	58	62.2

\*p<0.05; \*\*p<0.001. The statistically significant deviations above the mean value are marked in bold, the deviations below the mean are underlined. Sometimes the extreme deviations from the mean value were not statistically significant and then they were printed in italics. The table is divided with vertical lines into 7 year periods in order to make it more legible.

Symptoms: 50 - avoiding people, even close friends, 11 - skin itchiness, passing rashes, 26 - memory disorders, 106 - difficulty in thinking, 14 - head spinning, 51 - fainting, 83 - faintness, 102 - loss of energy, lowered activity, 136 - nausea, 109 - excessive sensitivity to light, sounds and to touch, 117 - unspecified "migrating" aches, 62 - suicidal tendencies, 34 - feeling of blood rushing to one's head, 128 - feeling of pale experiences, 126 - preoccupation of thought, 56 - "nervousness", motor tension, 77 - anxiety about being ill with a severe illness, 93 - muscle cramps, 25 - excessive intensity of experiences, 119 - hypersomnia.

Table 5

## A. Synchronism of symptom prevalence changes in women and men

Variable no.	Prevalence of a symptom in a year (%)																	Long-term mean				
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		1996	1997	1998	1999
24 - wom.	60	61	66	59	48'	59	68	62	56	58	64	62	69'	61	67	65	55	61	62	55	57	60,8
24 - men	48	52	53	58	55	51	56	49	58	49	48	65	73'	49	33*	58	57	53	56	60	62	54,9
64 - wom.	89	97	97	95	93	91	94	98'	92	98	93	95	95	97	94	93	91	96	94	93	88*	94,2
64 - men	95	85	92	95	94	87	89	98'	93	89	93	92	98'	85	91	89	89	85	94	88	92	91,5
57 - wom.	60	43	55	54	40'	56	60	58	63	58	48	66*	59	59	63'	60	51	49	42*	48	50	54,6
57 - men	50	54	58	64	61	58	67	62	52	60	57	73'	61	50	60	68	52	51	55	60	42*	58,7
97 - wom.	55	47	52	52	38	43	53	59'	53	48	50	58'	50	56	51	45	41	39	33**	43	41	47,6
97 - men	43	47	61	54	61	60	51	57	49	53	63	73'	59	44'	66	57	53	50	55	55	49	55,7

Symptoms: 24 - intense, permanently present generalised anxiety, 64 - uneasiness, 57 - constant observation of body functions (pulse, digestion, etc.), 97 - conviction about being severely ill somatically

## B. Discrepancy of symptom prevalence changes in women and men

Variable no.	Prevalence of a symptom in a year (%)																	Long-term mean				
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	
16 - wom.	95	97	91'	97	95	99	99	99	93	97	99'	97	98	97	98	99'	95	95	94	97	93'	96.0
16 - men	91	95	98	98**	100*	97	93	97	93	97	96	98	100*	94	98	95	96	89'	98	97	97	96.3
9 - wom.	47**	27	33	26	28	28	27	35	21	14*	27	24	23	29	28	21	24	29	23	28	27	26.8
9 - men	11	21	07'	27'	17	21	19	15	12	13	08	26'	29*	08'	14	20	18	12	09	18	25	17.2
69 - wom.	31	30	23	26	41'	29	28	22	18'	26	24	29	28	33	29	32	32	32	34	30	33	29.4
69 - men	23	21	20	25	22	35	31	36	27	15'	32	30	28	30	23	42'	37	38	30	28	32	29.1
101 - wom.	40	26	29	36	28	42	37	43	43	53**	38	32	35	37	40	33	31	40	28'	35	42	36.5
101 - men	25	31	29	33	42	27	34	41	31	41	36	43	40	18*	30	36	37	32	37	48'	31	34.5
129 - wom.	61	54	60	60	63	71	58	63	51'	58	63	75*	62	65	68	62	64	59	66	64	65	63.0
129 - men	40'	45	56	67'	53	62	57	61	49	49	54	68	53	45'	63	62	58	48	74*	65	57	57.0
76 - wom.	20	13	17	17	15	14	17	20	22	20	21	20	20	21	12	17	11'	16	21	20	26*	18.9
76 - men	13	30	21	34*	26	23	25	31	23	29	25	30	30	14*	16	21	22	25	18	26	23	24.7
114 - wom.	76	79	80	80	78	80	80	84	80	80	85	78	82	84	87*	77	76	76	67*	74	74	78.4
114 - men	72	78	76	71	71	82'	77	72	69	72	75	77	72	61'	80	71	70	68	68	82	64	73.2
5 - wom.	81	76	79	81	82	77	76	74	65'	74	74	76	77	87*	70	79	79	73	79	71	72	76.0
5 - men	25	26	16	28	23	27	31	18	24	26	26	39'	47**	17'	32	29	22	23	17	29	38'	27.3
96 - wom.	68	59	74	78	75	72	74	77	73	75	83*	71	73	73	65	70	68	61'	73	64	61*	70.4
96 - men	65	66	61	67	76'	69	67	70	62	59	77'	65	62	42**	57	80*	65	64	57	58	55	64.6
124 - wom.	46	51	51	58	50	55	51	62*	45	42	51	46	50	50	48	57'	42	48	45	44	43	48.6
124 - men	43	33	35	51	58'	46	47	39	46	46	46	57'	44	25*	39	36	28'	37	37	41	55*	42.8
138 - wom.	34	31	36	43'	38	36	34	43'	35	33	31	34	27	32	31	25	25	28	33	34	30	32.4
138 - men	40	28	29	36	50'	33	36	31	23'	31	23	47'	45	25	28	43	31	36	38	44	34	35.6
21 - wom.	68	63	54	62	62	64	54	70	65	73'	60	64	71'	67	60	67	59	62	59	61	60	62.7
21 - men	43	55	55	54	62	47	52	59	49	51	48	66'	61	27**	54	59	54	47	54	53	46	52.2
88 - wom.	31	35	28	38	31	33	30	43'	18*	32	28	31	31	31	23'	34	36	30	33	30	39*	32.3
88 - men	29	30	18'	30	36	25	32	21	25	33	20	38	26	18'	26	34	32	30	31	48**	40	30.3
89 - wom.	77	64	74	69	75	81	67	80	77	72	76	74	79'	83*	78	65	63	53**	63	65	62'	70.6
89 - men	54	64	74	70	68	69	63	72	61	68	66	77'	68	58	57	72	59	56	50'	72	60	65.3
123 - wom	66'	49	64'	63	60	57	56	56	47	55	60	58	55	61	50	48	47	45'	43*	44*	61'	54.3
123 - men	54	40	56	46	51	42	45	44	52	44	36	55	41	30'	50	39	32	36	28'	44	44	43.6
99 - wom.	71	71	71'	59	58	60	51	59	57	58	58	64	61	72'	53	58	60	59	58	55	64	60.9
99 - men	59	59	54	72'	60	65	69	59	59	62	50	68	61	52	51	71	68	55	59	63	47'	61.2
84 - wom.	69	61*	71	71	76	71	75	77	74	78	74	74	79	73	79	76	72	71	65*	73	67	73.0
84 - men	61	59	67	74	83'	55*	71	73	66	68	74	69	75	61	67	74	77	69	77	76	70	70.4

'p<0.05; \*p<0.01; \*\*p<0.001. The statistically significant deviations above the mean value are marked in bold, the deviations below the mean are underlined. Sometimes the extreme deviations from the mean value are not statistically significant and then they are printed in italics.

Table 6

Similarities of symptom prevalence changes  
A. Women

Variable no.	Prevalence of a symptom in a year (%)																	Lont-term mean				
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995		1996	1997	1998	1999
71	56'	50	43	37	40	35	49	55'	51	47	44	45	40	54'	44	45	41	45	34'	34'	45	44.1
119	75'	61	64	71	63	68	63	76'	69	64	67	69	69	74'	61	61	54'	57	56	59	57	64.0
12	66	70	72	69	69	75	78'	81'	74	69	64	68	63	74	61	68	61	62	58	58'	59'	66.5
6	88	82	87	85	88	84	96'	95'	85	92	88	93	87	88	86	92	82'	85	84	84	90	87.9
32	41	49	48	45	55	53	56	53	53	42	44	46	47	57'	35'	46	42	49	51	43	49	47.6
98	57	38	50	49	51	49	48	44	58	46	43	51	45	57'	48	45	36'	47	47	47	47	47.8
60	75	64	68	65	66	73	69	71	60	66	67	73	69	74	76'	68	60	60	57'	64	57'	66.5
20	88	78	84	86	82	86	85	88	84	83	84	87	86	88	89'	81	78	72'	72'	71''	77	81.3
114	76	79	80	80	78	80	80	84	80	80	85	78	82	84	87'	77	76	76	67'	74	74	78.4
81	60	52	51	39'	46	53	51	61	51	53	55	50	58	56	54	57	45	41'	47	53	57	52.4
105	69	71	61'	79	64	76	73	71	66	67	66	70	75	76	62'	71	73	73	69	70	66	70.4
82	85	79	84	89	83	85	82	88	73'	83	85	88	79	85	79	77	87	81	80	83	75'	82.5
45	77	85	87	89	75	92'	85	83	79	76	86	80	85	85	77	85	82	76	81	76'	78	81.5

Similarities of symptom prevalence changes  
B. Men

9	11	21	QZ'	27'	16	20	18	14	11	13	07	26'	29'	08'	14	19	17	11	09	17	24	17.2
42	77	73	62'	88'	81	82	76	81	83	78	86	82	94'	74	78	81	88	83	79	85	81	81.5
76	13	30	21	34'	26	23	25	31	23	29	25	30	30	14'	16	21	22	25	18	26	23	24.7
45	75	71	78	81'	75	73	75	78	67	62'	77	77	79	58'	76	74	64	66	72	73	66	72.6
39	70	73	67	86'	71	73	75	70	77	68	66	80	69	54'	62	78	73	68	75	67	61	71.3
79	61	52	63	77'	60	66	62	57	69	63	57	61	62	50'	60	66	65	50	61	58	50	61.4
20	70	74	80	86'	83	82	83	70	78	81	66	79	85	69	80	76	65'	68	72	79	71	76.7
65	47	54	49	64'	61	51	52	50	57	44	62	50	52	41	42	56	62	38'	51	54	44	52.1
84	61	60	67	74	83'	55'	71	74	66	67	74	70	75	61	68	74	78	70	78	76	71	70.4
11	72	71	65	66	76'	61	64	57	59	63	62	73	68	51	55	56	52	50'	64	61	58	62.2
14	70	54	61	66	71	61	63	63	62	53	41'	74'	63	51	58	56	50	60	53	59	56	60.0
109	43	45	50	37	41	43	42	42	45	44	37	57'	51	30'	50	43	31'	53	44	50	33	43.6
2	95	90	96	96	96	93	91	91	93	88	92	92	98'	88	92	96	98''	93	92	94	95	93.7
102	72	83	72	79	85	77	78	82	80	75	84	84	87'	64'	73	77	73	77	70	84	77	77.8
71	15'	33	31	37	43	29	43'	36	31	38	38	38	45'	11''	30	38	39	30	26	25	25	33.0
69	22	21	20	24	21	34	31	36	27	15'	31	30	27	30	23	42'	37	38	29	27	32	29.1
47	25	33	25	34	38	29	32	34	32	20'	21	28	31	39	35	43'	37	21	38	35	32	32.2
137	38	30	50	43	55	46	50	50	37	33'	40	42	47	31'	53	63'	49	44	50	42	35	44.9
27	25	30	32	33	41	44	33	39	28	29	37	38	43	24'	39	48'	37	36	43	35	30	36.0
49	61	47	56	48	60	53	53	54	59	63	50	57	59	41'	57	72'	49	58	50	66	52	55.7
105	56	64	49'	64	71	58	63	63	57	69	66	65	70	47'	58	68	68	58	51	57	72	62.3
30	75	61	61	59	64	48'	63	60	59	60	75	69	66	47'	66	72	71	55	62	66	61	62.9

'p<0.05; \*p<0.01; \*\*p<0.001. The statistically significant deviations above the mean value are marked in bold, the deviations below the mean are underlined. Sometimes the extreme deviations from the mean value were not statistically significant and then they were printed in italics.

Symptoms: 71 – anxiety in closed spaces, 119 – hypersomnia, 12 – compulsory task performance, 6 – morning feeling of tiredness, 32 – need to unnecessarily repeat actions, 98 – excessive thirst, 60 – "hot-flushes", "cold-spells", 20 – tachycardia, 114 – increased sweating, 81 – anxiety when being in a crowd, 105 – expectation anxiety, stage fright, 82 – pessimism, 45 – strong emotional reactions. B: 9 – vomiting, 42 – lost belief in oneself 76 – aggression outbursts on objects, 45 – strong emotional reactions, 39 – difficulties in falling asleep, 79 – frequent awakening at night, 20 – tachycardia, 65 – lack of control in emotion expressing, 84 – feeling of uncertain endangerment, 11 – skin itchiness, passing rashes, 14 – head spinning, 109 – hyper photo-, audio-, and tactile sensitivity, 2 – lowered mood, 102 – loss of energy (lowered activity), 71 – anxiety in closed spaces, 69 – diarrhoea, 47 – lack of sexual interest, 137 – lowered potency, 27 – sexual dysfunctions (no erection, premature ejaculation etc.), 49 – dry mouth, 105 – feeling of being underestimated, 30 – feeling of alienation.

Table 7

## A. Prevalence changes of symptoms in women

Variable no.	Prevalence of a symptom in a year (%)																			Long-term mean		
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997		1998	1999
63	50'	31	40	38	45	46	38	41	33	33	36	44	37	37	28'	34	31	35	29	38	38	36.7
103	73'	49'	70	65	73	74	70	68	71	69	54	67	66	71	68	66	56	57	50''	46''	65	62.9
113	66	43'	63	68'	66	57	65	60	58	57	63	62	66'	60	58	54	53	44'	46'	50'	57	57.7
3	66	52'	69	64	73	75	75	80'	68	72	68	69	70	74	65	82''	68	62	67	64	65	68.6
43	21	21	37''	21	28	19	23	21	25	29	25	28	23	28	19	17	20	22	21	18	29'	23.5
17	63	65	67	64	44'	66	63	59	59	68	59	66	67	75''	67	64	55	58	46''	55	60	61.3
1	46	42	58	53	45	60'	49	66''	51	52	52	53	54	53	49	45	38'	43	43	49	42	49.1
135	51	40	49	46	52	54	52	30'	44	43	47	51	40	54'	46	41	32''	41	38	33''	43	43.4
95	41	55	47	48	57	51	56	61'	49	51	50	38'	47	43	47	46	44	49	48	47	46	47.7
127	32	31	30	37	28	27	29	29	33	28	27	30	29	41'	24	30	30	26	38	39'	33	31.8
119	75'	61	64	71	63	68	63	76''	69	64	67	69	69	74'	61	61	54'	57	56	59	57	64.0
121	76	61	68	68	61	69	69	75	78'	76	67	73	72	75	62	74	62	62	56''	64	62	67.9



## B. Prevalence changes of symptoms in men

13	25'	36	45	41	52	44	39	39	36	42	42	55'	43	36	41	53	36	42	41	40	42	41.5
53	15'	48	36	53°	37	45	38	39	37	52°	34	49	38	36	39	36	31	32	41	37	35	39.0
131	29'	35	45	48	50	46	42	55'	47	49	46	49	44	40	35	46	38	43	48	45	36	44.3
28	32	26	35	37	55'	35	44	43	27	41	34	51	43	27'	43	48	33	40	46	35	43	39.2
70	43	43	33	51	55'	46	40	38	47	39	48	44	46	34	39	39	48	30'	37	43	43	42.3
78	18	26	20	30	38°	33'	28	26	22	25	20	19	22	19	20	21	13'	23	22	25	33	24.3
116	52	57	65	59	61	61	55	60	54	46'	74'	74°	63	42°	60	75°	59	53	66	61	56	60.0
108	32	40	29	37	48	33	42	36	31	35	26	46	50'	24'	29	41	31	35	37	46	37	36.7
41	32	24	31	25	42	37	36	38	41	30	30	40	33	17°	46'	42	30	25	35	31	29	33.0
35	80	79	84	90	83	83	87	87	85	84	86	87	92	72°	84	89	94'	82	93	88	89	85.8
107	11	17	13	19	13	21	19	20	14	13	14	25	21	07'	18	18	13	26'	19	21	14	17.0
6	84	83	87	91'	81	80	83	86	77	82	83	93'	81	80	78	86	83	86	88	91	81	84.5
77	55	57	72	66	71	74	67	78'	54'	65	80	79'	68	61	77	74	61	57	67	75	57	67.8
82	79	73	54''	77	81	79	76	72	77	71	89'	74	76	67	71	74	74	63'	77	79	75	74.7
15	61	57	50'	71	69	62	56	65	61	57	60	69	72	50'	69	65	65	64	57	73	67	63.6
136	34	40	40	44	40	44	46	51	27'	41	25'	48	46	34	39	47	39	38	31	41	40	40.3

\*p<0.05; \*\*p<0.001. The statistically significant deviations above the mean value are marked in bold, the deviations below the mean are underlined.

Symptoms: A - 63 - transient loss of eyesight or hearing, 103 - getting your breath, 113 - tremor of eye-lids, face, head, etc., 3 - feeling of having a lump in your throat, 43 - transient paresis of hands or limbs, 17 - finding signs of different illnesses in oneself, 1 - anxiety on balconies, bridges, on the edge of a precipice, 135 - buzzing in one's ears, 95 - daydreaming, 127 - menstrual disorders, 119 - hypersomnia, 127 - unjustified fear about the closest relatives.

B: 13 - muscle cramps (graphosporismus), 53 - tics, sudden body movements independent of one's will, 131 - burning sensation in one's throat, heartburn, 28 - derealisation (world behind a fog), 70 - difficulty in contacts with persons of the opposite sex, 78 - need to count the lampposts, cars, etc., 108 - déjà vu, 41 - anxiety in vehicles - trains, buses, etc., 35 - uncertainty, 107 - pain in sexual organs, 6 - morning tiredness, 77 - anxiety about being ill with a severe illness, 82 - pessimism, 15 - feeling a lack of independence, 136 - nausea or upset stomach.

Table 8

**Number of statistically significant deviations of frequency of symptom prevalence in the following annual periods**

Year	WOMEN		MEN	
	prevalence increase	prevalence decline	prevalence increase	prevalence decline
1979	22	1	0	12
1980	2	9	2	2
1981	13	7	0	11
1982	9	3	18	3
1983	6	5	12	0
1984	3	3	3	2
1985	3	0	2	1
1986	18	3	4	0
1987	0	7	1	3
1988	2	1	1	6
1989	4	2	5	2
1990	11	1	21	0
1991	5	0	12	0
1992	16	1	0	49
1993	4	7	1	2
1994	4	0	12	0
1995	1	13	2	5
1996	0	17	1	10
1997	0	23	1	3
1998	3	22	6	0
1999	9	13	5	2

The deviations from the long-term mean in each of these periods were related to symptoms of various kinds, however some specific patterns can be seen. For instance, in the female population: in 1981, the prevalence of somatic symptoms increased almost exclusively: (11 out of 13 – approximately 85%), in 1979 the somatic symptoms amounted for half (11) of the symptoms, and likewise in 1992 (8), while in 1986 the prevalence of only 2 somatic dysfunctions increased (11%), less than that of anxiety symptoms (4). In 1997 the prevalence of many anxiety symptoms and phobias decreased, as well as that of hypochondriac ones (3), in 1998 – 14 (64%) of somatic symptoms. In the male population: in 1982 there was an increase in the prevalence of 6 somatic symptoms (33% out of 18) and of three other variables related to sleep disorders, in 1990 the prevalence of many somatic symptoms rose (8 – 38% out of 21 (18%)), as well as that of anxiety ones (4 symptoms) and of hypochondriac (4). Out of

49 symptoms, whose prevalence decreased in 1992, there were 9 anxiety symptoms. More precise analysis of these data goes beyond the scope of this publication.

### Discussion

The data presented here provide considerable material for further research of many aspects of the specificity of neurotic disorders. For the sake of scope limitations, only the "hard data" are presented in this paper. It is worth noticing however, that almost all the symptoms occurred in at least 50% of patients, but not in every year. Data concerning the differences in prevalence of symptoms belonging to the same group (for example: derealisations, compulsions, hypochondriac symptoms) and the rhythm differences of these prevalence changes seem noteworthy; and so are data regarding similar prevalence as well as of similar mean number of symptoms in women and in men etc. The data regarding the differences of population of patients in treatment in the consecutive years seem also to be very important. For instance, the number of women and men entering treatment, the periodic differences (or absence of differences) in the intensity of disorders (mean values of the GSI) in women and in men [table 1], especially its relation to the economic, political and socio-cultural situation, require additional studies.

The results of this study need to be treated very cautiously, for two reasons at least. Firstly, the division into sub-groups of persons treated within one calendar year is purely artificial. It is the optimal way to organise the data easily and to create adequately numerous sub-groups, but probably makes it more difficult to disclose the nature of prevalence changes of the symptoms. Secondly, the results describe only symptom prevalence changes of symptoms in persons entering treatment of neurotic disorders and cannot provide direct information on the changes in neurotic disorders' symptomatology. Last but not least, it is open for discussion whether self-reporting of the symptoms in the symptomatic questionnaire is a more or less reliable information regarding the existence of a symptom, than the psychiatric examination protocol [18]. As a matter of fact, the patients' responses on the questionnaire items express only – like a complaint – the presence of distress connected with a symptom and not the symptom itself.

Despite of all these reservations, it seems probable that the results of this study confirm the existence of a transformation of neurotic syndromes. In the 21 years, the apparent prevalence of approximately 60% of the symptoms, to which the "O" check-list variables refer, differed at least twice from the long-term mean value on a statistically significant level. In another circa 25% of variables, at least one such difference was noted. Like the multiple changes in the prevalence of some symptoms (especially heart pain, headaches, muscle trembling, unspecified pain ailments and balance disorders, especially in the female population), it indicates the probability of a variation in the particular symptom appearance. Absence of statistically significant deviations from the long-term mean was found in only 11% of the female population and in only 17% of variables in the male population.

Those differences cannot be explained either by the nature of those symptoms, nor by the mean value of their prevalence. Taking into account the number and the distri-

bution of changes in symptom prevalence in the consecutive one-year periods, those differences also cannot be attributed to possible proportion changes of persons being treated because of various neurotic disorders. Such a possibility requires however verification in additional studies.

In the women's population, a slightly larger number of symptoms changed their prevalence than in the male population. It is coherent with a common impression that changeability of symptoms in women is larger than in men. Differences are however not very large despite a relatively large number of sub-groups treated in the yearly periods, and therefore those differences can be accidental and can be linked related to the lower number of men's sub-groups. In the years when a considerable number of male patients were treated (1984 and 1985, table 8), the number of significant deviations from the mean value was similar in both populations. In some periods even prevalence changes in a significantly larger number of symptoms were observed in the men's population than in the women's one.

It seems however, that in spite of the absence of larger differences in number and kind of symptoms there are some differences in symptom changing process' specificity in the female and male populations. The direction of changes in prevalence is seldom quite parallel in both populations. Generally, those changes appear in different periods in the female than in the male population. At times the prevalence of one symptom in the women's population increased even as it became rare among men (for instance pain in heart or chest and loss of appetite (the variables number 40 and 54) in 1992, table 4). Moreover, in the periods, when the changes were especially numerous (table 8), the direction of prevalence changes was different in the women's and men's populations – only in 1990 simultaneous increase in the prevalence was observed and in 1996 a decreased prevalence of many symptoms in both populations was noted.

One tendency appeared in all the patients, namely that the prevalence of some, mainly anxiety symptoms rose with time – i.e. generalised, free-floating anxiety and panic attacks, also one of the depersonalisation's symptoms as well as two somatic ailments – flatulence and hunger attacks. In the women's population there is a tendency to experience feelings of guilt and obsessive thoughts of blasphemous content more often; in the male population – the observed tendency is to feel more often excessive dependency and agoraphobic fears.

The number of symptoms, whose prevalence increased with the passing years, was lower than of those, whose prevalence decreased. They were (in both populations): feeling of tiredness, of fearful expectations, one of the social phobia symptoms (feeling not well in a large social group), sensory conversions (loss of tactile and pain feeling), heart pains, headaches, as well as muscle pains and loss of appetite. Furthermore, in the female population the frequency of 18 other symptoms decreased. These were the following symptoms: avoidance of people, skin itching, memory gaps, feeling of difficulty in thinking, vertigo, fainting, collapses, feeling of energy loss, diarrhoea, hypersensitivity to light, sound, touch; unspecified "relocating" pains, suicidal tendencies, blood flushes to the head, feeling pale, rush of ideas, movement tension, fear of falling sick, excessive saliva production. In the male population only prevalence of two symptoms decreased: excessive intensity of experiences and sleepiness episodes during the day.

Difference between the number of symptoms, whose prevalence decreased with years; and the number of symptoms, which became more frequent, can be linked – to some extent at last – with the fact, that the treatment was initiated by persons with a lower than mean intensity of the disorders (women in years 1995 – 1999, men in 1992 etc.). This hypothesis is contradicted, however by the constancy of the mean number of symptoms, as expressed in SCL. In the female population, these mean values did not differ significantly from the long-term mean in any of the periods and in the male population only one statistically significant difference was seen (in 1992, see table 1).

The research results indicate that this stability in the mean number of symptoms is connected with irregular, transitory prevalence increase or decrease of particular symptoms in various periods. As it seems, such results confirm the thesis that the complex of neurotic symptoms is a system – a structured set, in which individual elements (symptoms) change under the influence of circumstances, exterior in respect of such a system, but not changing the whole system's core [19].

Sometimes, the prevalence of a particular symptom was higher in women and in other periods in men (for example specific phobias – variable number 101, see table 5A). This puts doubt on the results of researches concerning prevalence of neurotic symptoms, which did not take into consideration the phenomenon of periodical changes of this prevalence, even they are performed on numerous populations (for instance, analysis of a significant part of the same material collected in the years 1978 – 1997 [20]). For example, in this study anxiety (uneasiness) in the population of 1970 women and of 1226 men – appeared statistically significantly more often in women (94,9%) than in men (91,85%). However, in the sub-groups being in treatment in the years 1991 and 1999 it appeared more frequently in men than in women (variable number 64, table 5A).

In some periods, there were more frequency changes than in others (see table 8). Some prevalence changes of symptoms seem to be directly linked with the social situation – for example increase in the prevalence of feeling of tension in the female population in 1989 and in the male population in the years 1982 – 1983 or in 1991 (variable number 16, table 5B). Deep socio-political, economic and cultural changes were taking place in Poland in those years. Probably deeper analysis of the relation between the changes in the prevalence of some symptoms (especially somatic symptoms and sexual dysfunctions) and such socio-cultural factors, will lead not only to an explanation of the phenomenon of changes in prevalence but also to an understanding of their symbolic functions.

### Conclusions.

The research results indicate that the frequency of neurotic symptoms changed during the 21 years. Sometimes it changed even dramatically fast – the statistically significant deviations from the long-term mean value in the direction of frequency increase and decrease, occur even in the annual periods. This causes significant changes of the neurotic disorders' symptomatology.

Frequency changes of the majority of symptoms described in SCL "O" were noted both in the female and in the male population. Frequency of some symptoms changed

only in women or only in men. Those changes did not affect the general number of symptoms, similar (only slightly bigger) in women's population.

Symptoms, of which the frequency is relatively constant, like the frequency of those symptoms, of which the frequency changes – are the symptoms of various neurotic disorders.

Frequency of all symptoms in the whole population explored is considerably higher than the expected one due to the type of diagnosis. Higher or lower frequency of any symptom appearance is not linked with the incidence of a change of this frequency. This makes the basic concepts of neurotic disorders classification very doubtful.

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## ANNEX

## I. Only one significant deviation from the long-term mean value – women

Year Variable no	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Long-term mean
15	<b>82'</b>	71	64	79	64	69	78	69	73	71	72	67	77	75	67	73	74	71	72	68	75	72.5
49	<b>73'</b>	62	66	67	61	59	67	59	65	56	53	61	57	66	57	69	55	55	62	59	60	61.2
61	<b>38'</b>	29	28	31	25	24	36	32	36	33	22	30	34	24	23	25	24	24	28	28	28	28.7
75	<b>87'</b>	70	72	82	73	75	83	75	77	77	81	80	71	75	72	79	81	76	80	81	73	77.7
110	<b>76''</b>	56	66	58	63	57	59	66	51	60	53	55	61	55	52	57	57	50	55	54	53	57.4
7	44	<u>40'</u>	44	60	53	53	62	56	50	53	54	57	55	53	52	51	48	49	55	47	53	52.3
118	66	<u>47'</u>	61	58	58	62	55	62	62	<b>58'</b>	63	62	59	68	58	63	57	61	64	58	62	61.0
137	51	<u>31'</u>	48	40	48	40	46	45	45	40	40	48	45	41	41	45	37	50	42	42	37	43.2
74	37	44	<b>56'</b>	50	48	42	36	48	51	52	45	51	50	42	39	39	42	45	50	42	41	45.4
55	77	65	<u>58'</u>	65	64	68	72	64	62	67	70	70	68	73	63	70	71	73	70	69	71	69.2
115	64	62	<u>52'</u>	71	61	68	65	58	59	64	59	64	67	67	58	64	70	66	68	65	65	64.5
80	58	47	48	<b>61'</b>	50	52	56	50	41	50	48	52	50	42	52	40	45	43	47	46	43	48.5
90	63	55	53	<b>72'</b>	60	59	62	65	51	60	61	56	64	59	60	64	64	60	67	68	64	62.3
108	34	34	38	<b>45'</b>	40	40	32	33	38	29	30	35	28	35	29	28	30	31	30	38	35	34.0
33	25	26	28	25	<b>36'</b>	26	29	25	17	18	25	21	19	18	20	21	20	19	25	28	24	23.6
46	87	77	81	85	71	76	81	<b>90'</b>	72	77	75	85	84	82	78	78	77	79	77	74	80	79.7
65	60	55	60	67	68	63	60	<b>75'</b>	57	58	66	60	66	67	58	58	65	57	67	60	66	62.9
42	93	91	81	87	80	89	89	<u>79'</u>	80	82	88	88	91	91	87	90	88	86	89	87	83	87.1
48	27	40	37	42	38	36	36	38	<u>25'</u>	33	34	30	29	42	30	39	40	34	38	35	42	36.2
72	78	82	80	84	76	76	78	83	<u>68'</u>	76	81	79	81	83	77	80	73	77	74	76	74	78.2
28	43	50	51	52	46	44	45	51	42	<u>35'</u>	49	48	45	47	38	43	44	44	46	46	44	45.8
25	86	91	94	94	91	91	89	93	86	91	<b>96'</b>	92	90	93	87	88	87	87	89	89	86	90.1
35	89	82	86	89	86	86	93	82	86	89	<b>95'</b>	85	94	94	89	91	88	91	89	89	86	89.1
18	75	80	80	86	80	85	84	85	74	84	77	<b>88'</b>	87	87	85	83	80	75	78	78	76	81.5
131	43	26	44	32	34	36	46	32	36	41	33	<b>46'</b>	41	34	33	38	37	31	37	36	34	37.2
37	46	50	47	53	43	53	50	56	47	47	42	52	<b>62''</b>	54	48	55	50	47	43	43	48	49.7
70	48	37	41	50	36	37	51	38	45	43	44	45	37	<b>28''</b>	41	39	35	41	41	45	45	41.8
66	93	94	92	90	91	86	84	95	82	92	89	89	93	87	<b>83'</b>	91	84	86	89	91	88	89.3
13	44	40	48	43	34	40	40	44	36	42	37	50	49	51	41	50	<b>34'</b>	43	38	42	45	43.3
73	28	26	30	29	21	24	26	28	22	27	29	26	27	24	22	28	23	<b>17'</b>	21	20	30	25.5
41	47	46	42	41	33	52	50	44	47	50	45	44	42	40	46	44	37	36	<b>33'</b>	36	41	42.2
27	31	25	26	30	31	21	26	23	25	23	22	30	28	31	25	27	25	20	25	<b>19'</b>	22	25.5
38	31	20	23	28	30	21	25	29	21	23	27	25	33	37	27	35	28	29	34	32	<b>43''</b>	30.2
53	38	31	34	36	36	30	39	33	36	26	31	36	33	36	33	39	33	29	31	29	<b>42''</b>	34.2
107	28	22	26	31	30	28	26	30	30	24	28	25	26	29	30	30	28	24	21	23	<b>34'</b>	27.8

'p<0.05; \*p<0.01; \*\*p<0.001. The statistically significant deviations above the mean value are marked in bold, the deviations below the mean are underlined.

## II. Only one significant deviation from the long-term mean value – men

Year Variable no.	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Long-term mean
37	<u>34'</u>	42	56	50	55	41	50	55	52	45	48	61	55	41	57	57	53	48	61	44	43	50.3
52	<u>27'</u>	35	34	51	51	44	38	45	45	50	37	50	52	35	42	42	37	50	33	38	44	43.0
38	38	28	<u>18'</u>	28	26	28	32	34	28	26	36	31	37	22	37	40	35	30	33	42	40	32.2
62	34	33	<u>20'</u>	38	38	33	35	27	42	27	40	33	37	27	28	31	34	40	37	32	44	34.2
67	43	35	52	48	<b>63'</b>	50	51	52	52	40	54	55	52	47	57	62	49	50	50	44	46	50.5
74	29	33	18	27	<u>40'</u>	29	27	26	30	27	30	31	27	17	21	33	19	25	24	25	26	27.0
83	15	33	27	27	<u>36'</u>	26	20	32	25	23	20	31	23	17	17	18	19	23	16	20	23	23.7
34	45	47	56	61	63	52	<b>66'</b>	59	55	62	51	63	54	45	53	50	46	51	48	57	58	55.4
12	59	64	56	74	68	62	60	<b>80'</b>	71	69	60	74	68	60	60	63	71	61	68	66	69	66.3
95	56	64	49	56	63	47	58	49	<b>66'</b>	61	56	57	52	45	44	45	44	48	46	58	49	53.3
55	61	54	52	67	63	52	56	68	54	<u>50'</u>	56	73	66	57	69	66	67	58	70	66	69	62.1
72	77	69	60	65	73	66	75	75	64	65	<u>54'</u>	69	76	61	64	57	70	63	70	65	64	67.2
17	59	54	65	61	69	64	58	73	61	56	72	<b>82'</b>	66	60	71	71	64	64	67	63	61	65.1
60	50	54	58	53	50	56	61	55	50	55	43	<b>68'</b>	63	44	60	59	49	50	48	66	44	54.8
43	20	23	23	20	20	20	20	21	25	21	20	15	<b>30'</b>	14	12	21	19	20	15	16	15	19.9
3	45	45	45	59	66	55	53	57	52	55	60	61	65	<u>42'</u>	62	59	49	53	50	63	60	55.7
46	77	66	72	82	76	79	77	78	76	72	83	82	81	<u>65'</u>	69	72	73	76	79	79	81	76.7
48	31	33	27	30	40	24	36	36	25	40	25	38	34	<u>20'</u>	37	39	34	33	38	44	40	33.9
50	56	57	52	64	61	56	58	54	64	55	68	68	63	<u>45'</u>	55	68	67	51	72	64	61	60.3
51	04	19	18	08	11	15	20	16	13	17	14	12	18	<u>04'</u>	10	12	16	18	09	08	12	13.5
90	50	52	52	65	64	61	56	57	55	50	66	58	59	<u>38'</u>	46	57	56	51	57	64	56	56.5
98	45	50	52	56	55	50	47	39	45	52	37	52	48	<u>35'</u>	41	51	47	40	35	57	49	47.5
106	68	71	74	82	75	79	80	81	76	73	69	82	81	<u>65'</u>	73	75	77	66	81	79	81	76.6
118	54	66	50	54	61	50	57	52	52	55	50	60	55	<u>40'</u>	48	56	56	46	53	61	55	54.2
126	81	88	70	82	71	79	78	81	74	79	74	79	84	<u>67'</u>	71	78	74	80	87	79	72	77.9
63	27	35	41	32	31	32	30	31	22	26	21	31	38	30	<u>17'</u>	36	35	28	20	33	33	30.6
73	25	21	27	24	26	28	21	27	23	26	18	26	26	15	25	<b>37'</b>	29	29	22	28	20	24.9
80	27	40	45	37	33	37	40	44	38	33	40	42	43	30	32	<b>53'</b>	34	40	44	39	40	38.9
93	34	38	43	51	55	53	43	39	45	42	54	47	45	37	41	<b>57'</b>	38	43	48	44	33	44.9
1	36	42	50	44	51	47	41	49	47	39	43	53	51	35	41	36	34	<u>30'</u>	44	38	32	42.4
33	29	33	36	29	30	37	26	31	37	28	36	34	20	25	17	30	23	<u>15'</u>	27	32	36	29.4
135	31	38	40	39	51	46	40	49	35	46	31	47	45	31	46	34	29	28	<u>25'</u>	44	40	39.6

'p<0.05; \*p<0.01; \*\*p<0.001. The statistically significant deviations above the mean value are marked in bold, the deviations below the mean are underlined.



TABLE I

Symptoms: 15 – feeling of a lack of independence, 49 – dry mouth, 61 – Feeling afraid in open spaces or on the street, 75 – low self esteem, 110 – unfriendly outer world, 7 – dissatisfaction with the sexual life, 118 – feeling of protest/rebellion, 137 – potency reduction, 74 – constipation, 55 – feeling of helplessness, 115 – feeling of dependence, 80 – getting red on the face, neck, 90 – feeling of being under other peoples influence, 108 – déjà vu, 33 – stuttering, 46 – feeling of lower brightness of thinking, 65 – lack of control of emotions' expression, 42 – lost belief in own strengths, 48 – feeling of the world as unreal, 72 – psycho-motor function slowing down, 28 – derealisation (foggy world), 25 – excessive intensity of experiences, 35 – uncertainty, 18 – obsessive thoughts, 131 – burning sensation in one's throat/ heartburn, 37 – exaggeration in trying to avoid illness, 70 – social phobia, 66 – difficulties in concentrating, 13 – muscle cramps, 73 – temporary speech-loss, 41 – anxiety in vehicles - trains, buses, etc., 27 – sexual dysfunction (no erection, premature ejaculation etc.), 38 – obsessive thoughts of an aggressive character, 53 – ticks, 107 – pains of sexual organs

TABLE II

Symptoms: 37 – exaggeration in trying to avoid illness, 52 – compulsion to wash hands and touch objects etc., 38 – obsessive thoughts of aggressive content, 62 – suicidal tendencies, 67 – lowering of sexual drive, 74 – constipation, 83 – faintness, 34 – blood strikes to the head, 12 – compulsive actions (checking), 95 – daydreams, 55 – feeling of life helplessness, 72 – psycho-motor action slowing down, 17 – conviction of having a somatic disease, 60 – hot or cold spells, 43 – momentary paresis of hands or limbs, 3 – feeling of having a lump in your throat, 46 – feeling of lower brightness of thinking, 48 – derealisations (feeling of unreality of environment), 50 – avoidance of people, 51 – fainting, 90 – feeling of being under other peoples' influences, 98 – excessive thirst, 106 – difficulty in thinking, 118 – feeling of protest/rebellion, 63 – temporary loss of eye-sight or hearing, 73 – temporary speech-loss, 80 – getting red on the face, neck, 93 – muscle cramps, 1 – being afraid of heights, 33 – stuttering, 135 – buzzing in one's ears.

